

Remarks

Favorable reconsideration of this application is requested in view of the following remarks. Claims 1-22 remain pending in the case.

In paragraph 2 on page 2 of the Office Action, claims 1-4 and 7 were rejected under 35 U.S.C. §102(b) as being anticipated by Yamamoto et al. (U.S. Patent 5,936,985). In paragraph 3 on page 3 of the Office Action, claims 5-6 and 8-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yamamoto et al. (U.S. Patent 5,936,985) in view of Kitaoka et al. (U.S. Patent 5,960,259).

According to the Office Action, with respect to claims 1-4 and 7, Yamamoto discloses Applicants' invention substantially as claimed. However, according to the Office Action, with respect to claims 5-6 and 8-22, Yamamoto does not disclose a first mechanism that detects a wavelength of a first light. Nevertheless, according to the Office Action, Kitaoka discloses a first mechanism that detects the wavelength of the first light.

Thus, according to the Office Action, it would have been obvious at the time the invention was made for a person having ordinary skill in the art to modify a mechanism that detects the wavelength of the first light because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of the invention.

Applicants respectfully traverse these rejections. Applicants respectfully submit that the cited references, alone or in combination, do not disclose, teach or suggest the invention. Applicants submit that there are patentable differences between the cited references and Applicants' invention. Applicants' invention differs from the cited references in at least the following respects.

The present claims require at least a wavelength converting device for converting a first light (fundamental light) into a second light having a second wavelength, and detecting and controlling a wavelength of the first light (fundamental light) to a desired wavelength so that the wavelength of the second light (harmonic light) is controlled. Thus, the present invention uses an unwanted first light (fundamental light) resulting from wavelength conversion to control the wavelength of the second light (harmonic light) to have the desired value.

Yamamoto fails to teach or suggest at least a wavelength converting device converting the first light into a second light having a second wavelength, wherein the wavelength of the first

light is detected and controlled to a desired wavelength, so that the wavelength of the second light is controlled as recited in Applicants' claim 1. Rather, Yamamoto merely discloses a coherent light source in which a part of a harmonic light generated by wavelength conversion is guided to a detector 28 by a beam splitter 27. Accordingly, in Yamamoto, a wavelength of a fundamental light source is controlled so that the output of the harmonic light becomes maximum.

With respect to claim 5, the Office Action admits that Yamamoto fails to teach or suggest a first mechanism that detects a wavelength of a first light. However, Kitaoka fails to remedy the deficiencies of Yamamoto. Kitaoka fails to teach or suggest at least a first mechanism that detects the wavelength of the first light and controls it to a desired wavelength and a second mechanism that controls a phase-matching wavelength of the wavelength converting device to the wavelength of the first light are provided to control the wavelength and output of the second light.

Therefore, in view of the above remarks, Applicants' independent claims 1 and 5 are patentable over the cited reference.

Because claims 2-4, 6-13 and 15-16, which depend directly or indirectly from claim 1, and claims 14 and 17-22, which depend directly or indirectly from claim 5, include the features recited in the independent claims as well as additional features, Applicants respectfully submit that claims 2-4 and 6-22 are also patentably distinct over the cited references. Nevertheless, Applicants are not conceding the correctness of the Office Action's rejection with respect to such dependent claims and reserve the right to make additional arguments if necessary.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions or concerns regarding this communication can be addressed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 371-5237.

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